

Work Order ID 134278

134278

Page 1

Wednesday, July 08, 2015 3:06:59 PM

Item ID: D4711-043 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Expandable Pin Assembly
 Start Date: 7/07/15 Start Qty: 6.00 *6* Cust Item ID:
 Required Date: 7/07/15 Req'd Qty: 6.00 *6* Customer:
 Reference:

Approvals: Process Plan: MLS Date: JUL 09 2015 Tooling: _____ Date: _____
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____
 Run Start *NR1*
 Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4711	C								
100		0.00							
100									
Purchasing	Memo	0.00							
Purchasing	Issue P/O: <u>29071</u>								
	Possible supplier: Mc Master Carr								
	Supplier P/N: 97787A661								
	Material release note is required								
110	Receive & Inspect for Damage & Mat'l Certs	0.00							
110									
Packaging	Memo	0.00							
Packaging									
120	QC6- Inspect dimensions to drawing	0.00							
120									
QC	Memo	0.00							
Quality Control									

CY JUL 09 2015 6

6x SP15-07-13

15-07-13

DAS
9
9-88

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: ~~BAW~~ Date: 16/07/04Work Order update only ☐

Work Order: <u>134278</u> Part No. <u>D4711-043</u> NCR No. <u>16-5881</u>		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☒ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube ☐</td> <td>Cross tube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☒</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☒	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Date: <u>15.07.13</u>		Step #: <u>120</u>		QTY Effective: <u>6</u>		MRB (QSI042) Approval <u>A.P. → CP</u> <u>15.07.13</u>																			
Description Work Order Deviation				Disposition																					
McMASTER-CARR quick release pins do not resemble pins on attached dwg.				ACCEPTABLE TO USE PINS. TEST FIT WAS CONDUCTED AND ALL OTHER ASPECTS OF PIN REMAIN UNCHANGED, NO EFFECT ON STRENGTH. PREVIOUS PINS HAVE BEEN DISCONTINUED <u>DRAWINGS UPDATED 15/7/22</u>																					
								Completed By <u>DAS</u> <u>38</u> <u>9.88</u> JUN 24 2016																	
								Lead hand / Supervisor Approval Verification <u>PD 16-06-24</u>																	
QC / QA Coordinator Approval <u>PD 16-06-24</u>																									

Root Cause				FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☒	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	☒ Drawing		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER: _____					
Misidentified ☐	Past Due ☐						

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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Wednesday, July 08, 2015 3:06:59 PM

Page 1

134278

D4711-043

Required Date: 7/07/15

Required Qty: 6.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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6

97787A661

Expandable Pin

6x 80 1507P

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

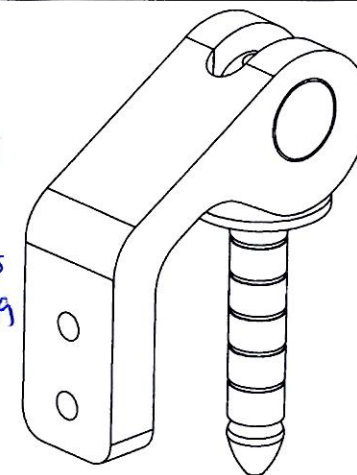
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

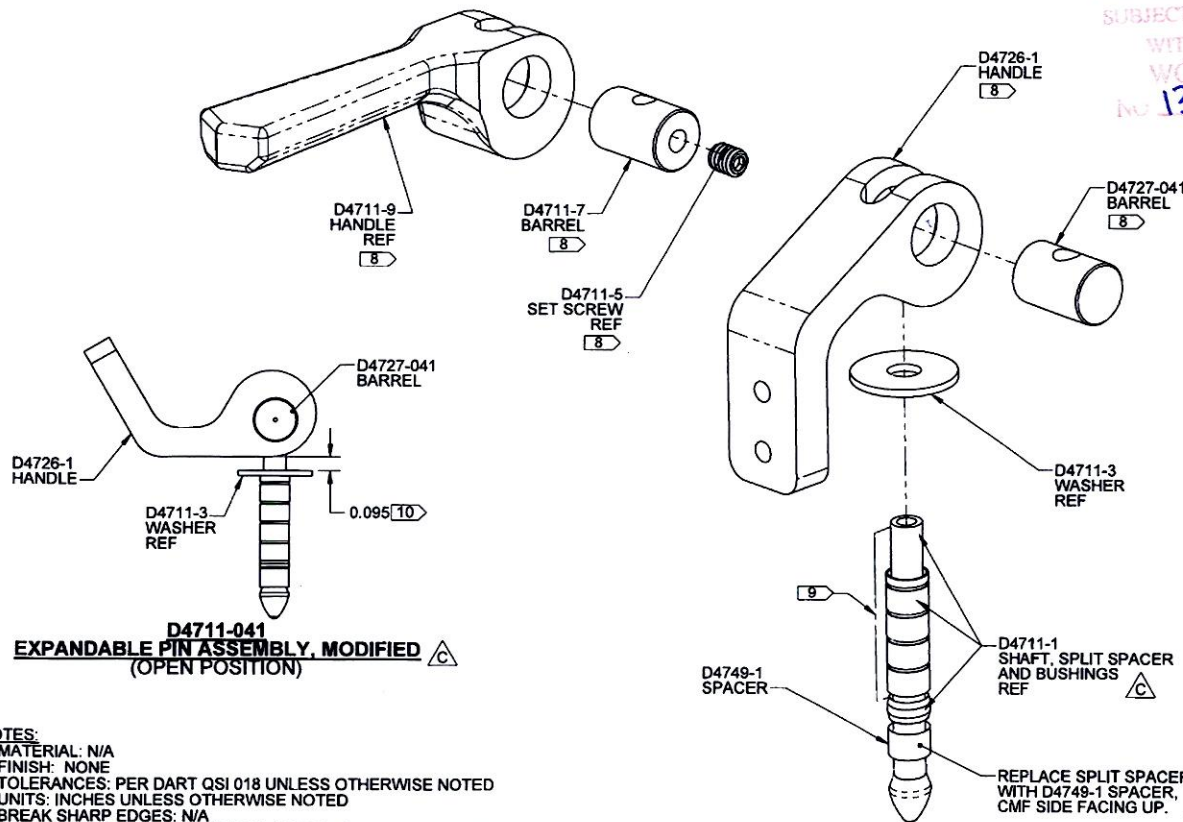
ITEM	QTY	P/N	DESCRIPTION
	X	D4711-041	EXPANDABLE PIN ASSY, MODIFIED
1	1	D4711-043	EXPANDABLE PIN ASSY
2	1	D4726-1	HANDLE
3	1	D4727-041	BARREL
4	1	D4749-1	SPACER

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

NO 134278 MJS
15-07-09



**D4711-041
EXPANDABLE PIN ASSEMBLY, MODIFIED
(CLOSED POSITION)**



**D4711-041
EXPANDABLE PIN ASSEMBLY, MODIFIED
(OPEN POSITION)**

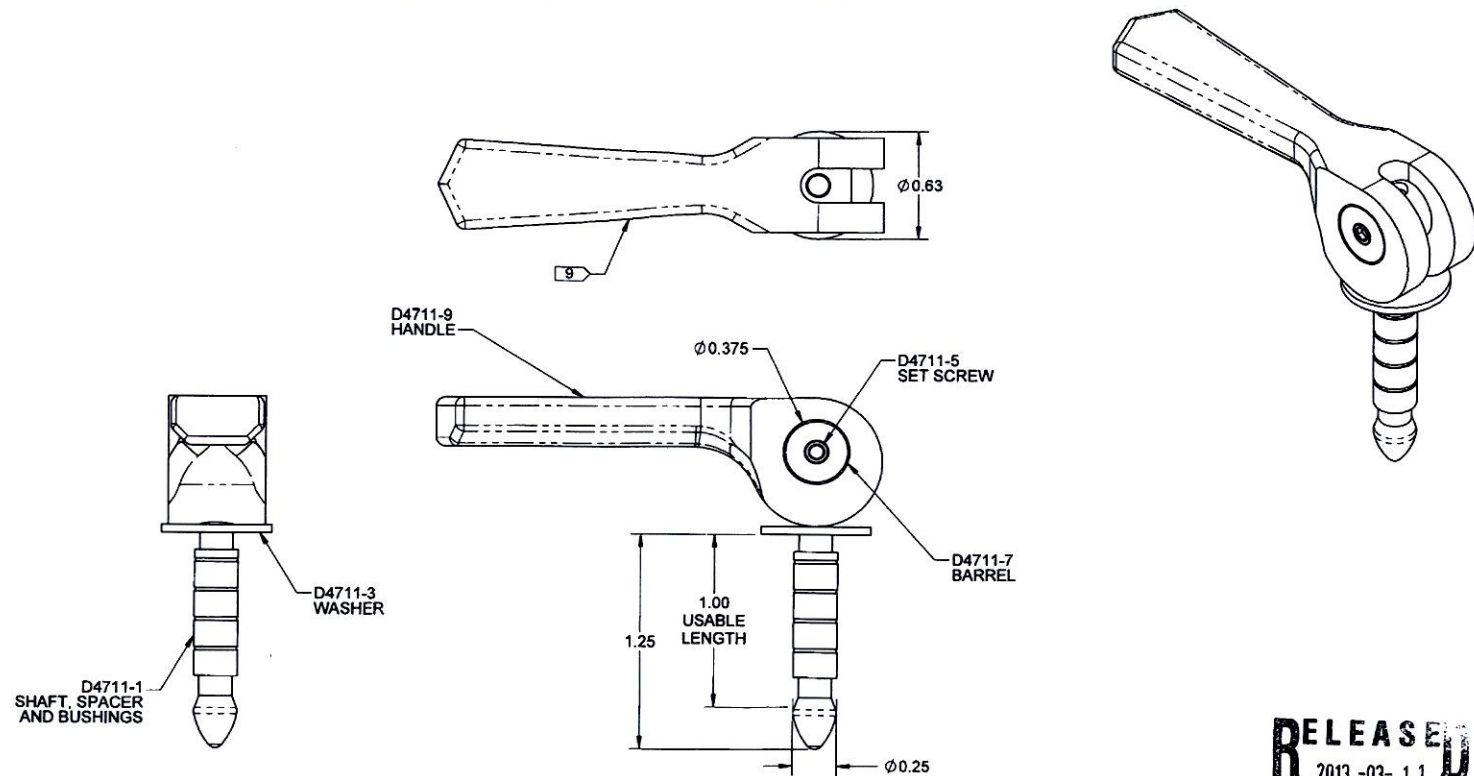
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4711-041" AND B/N "BXXXXX" PER QSI 044 6.7
- 7) WEIGHT: 0.19 lbs
- 8) REPLACE D4711-9 HANDLE WITH DART D4726-1 HANDLE.
REPLACE D4711-7 BARREL WITH DART D4727-041 BARREL.
REPLACE BOTTOM SPLIT SPACER WITH D4749-1 SPACER.
DISCARD D4711-5 SET SCREW, D4711-7 BARREL, D4711-9 HANDLE, BOTTOM SPLIT SPACER.
- 9) WHEN INSTALLING D4749-1 SPACER, ENSURE THAT ALL RETAINED SPLIT SPACERS AND BUSHINGS REMAIN IN THEIR ORIGINAL SEQUENCE AND ORIENTATION.
- 10) INSTALL THE D4711-1 SHAFT WITH THE ASSEMBLY IN THE OPEN POSITION, UNTIL A GAP OF 0.095" EXISTS BETWEEN THE D4711-3 WASHER AND THE D4726-1 HANDLE. DO NOT OVERTIGHTEN THE SHAFT INTO THE D4727-041 BARREL.

RELEASED
2013-03-11

C	REVISED NOTE (A4-1) & NOTE 8. ADDED NOTE 10. PICTORIAL UPDATE. ADDED VIEW B8-1.	AP	13.02.12
B	ADDED D4749-1 SPACER, MODIFIED NOTES 8 AND 9	AP	12.11.23
A	NEW ISSUE	RP	12.09.19
REV.	DESCRIPTION	BY	DATE
DESIGN	RP	DART AEROSPACE USA, INC.	
DRAWN	AP	KENT, WA	
CHECKED	ALS	DRAWING NO.	REV. C
MFG. APPR.	AP	D4711	SHEET 1 OF 2
APPROVED	AP	TITLE	SCALE
DE APPR.	AP	ADJUSTABLE DIAMETER PIN	NTS
DATE	13.02.12	COPYRIGHT © 2012 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL. WHO IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

SPECIFICATION CONTROL DRAWING



D4711-043 EXPANDABLE PIN ASSY

NOTES:

- 1) MATERIAL: CORE PIN, SPLIT RINGS & BARREL: STAINLESS STEEL 17-4 PH CONDITION H925 PER AMS 5643
- 2) FINISH: N/A
- 3) TOLERANCES: N/A
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.14 lbs
- 8) RECOMMENDED SUPPLIER: MCMASTER CARR P/N 97787A661
- 9) HANDLE, BARREL AND SET SCREW TO BE DISCARDED AT NEXT HIGHER ASSEMBLY

DESIGN	RP	DART AEROSPACE USA, INC.	
DRAWN	AP	KENT, WA	
CHECKED	AS	DRAWING NO.	REV. C
MFG. APPR.	at	D4711	SHEET 2 OF 2
APPROVED	AP	TITLE	SCALE
DE APPR.	AP	ADJUSTABLE DIAMETER PIN	NTS
DATE	13.02.12	COPYRIGHT © 2012 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

RELEASE
2013-03-11



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO29071**

Purchase Order Date 7/9/2015

PO Print Date 7/10/2015

Page Number 3 of 10

Order From :

VU-MCM001

Ship To : DART AEROSPACE LTD

MCMaster-CARR SUPPLY CO,
P.O. BOX 7690
CHICAGO, IL 60680-7690
US

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone

330 995 5500

Ship To Contact

Ship To Phone

Ship Via:

Purolator ground ppd

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 10

Currency

USD

FOB

FCA - (Free Carrier)

Line Total: \$156.48

7 97787A661

Expandable Pin

7/13/2015

Yes

7/13/2015

6.00

Each

\$114.68

\$688.08

AS PER DWG D4711 REV. C
B134278

Line Total: \$688.08

8 D3373-1P

Cam Lock

7/13/2015

Yes

7/13/2015

10.00

Each

\$6.32

\$63.20

AS PER DWG D3373 REV. A
B134286
MCMaster P/N: 1770A525

Line Total: \$63.20

10 71400-40

8860K62 302/304 STEEL
WIRE 0.025"

7/13/2015

Yes

7/13/2015

5.00

Each

\$20.20

\$101.00

Note:

7/10/2015

200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada
Attention: Luc / Andy

Purchase Order
PO29071

Order Placed By
Chantal Lavoie

McMaster-Carr Number
5807576-03

Page 1 of 2

07/10/2015

Line	Product	Ordered	Shipped
1	94035A560 Tight-Tolerance Socket Drive Shoulder Screw, 18-8 Stainless Steel, 1/4" Diameter X 1/4" LG Shoulder, 10-24 Thread Your Part Number: 71500-30	5 Each	5
2	94035A402 Tight-Tolerance Socket Drive Shoulder Screw, 18-8 Stainless Steel, 3/8" Diameter X 3/8" LG Shoulder, 5/16"-18 Thread Your Part Number: 71500-30	4 Each	4
3	4630A13 Nylon Mesh Sanding Bit, 1/8" Diameter Shank, Shape Number B52, Coarse Grade Your Part Number: 71500-30	2 Each	2
4	4630A13 Nylon Mesh Sanding Bit, 1/8" Diameter Shank, Shape Number B52, Medium Grade Your Part Number: 71500-30	2 Each	2
5	4630A13 Nylon Mesh Sanding Bit, 1/8" Diameter Shank, Shape Number B52, Fine Grade Your Part Number: 71500-30	2 Each	2
7	97787A661 Expanding Diameter Quick-Release Pin, 1/4" Diameter, 1" Usable Length Your Part Number: B134278	6 Each	6
8	1770A525 Cam Lock with Polished Nickel Finish, Keyed to C420A, 3/4" Diameter Hole, 7/64" Material Thickness Your Part Number: D3373-1P	10 Each	10
9	8860K62 Bend-and-Stay 302/304 Stainless Steel Wire, 0.025" Diameter, 1 lb Can, 595' Long Your Part Number: 71400-40	5 Each	5
11	7194K28 High-Starting Amp Rocker Switch, SPST, Off-On, Black Your Part Number: 71400-30	2 Each	2
12	6730T24 Armored Building Cable with Insulated Ground, 12 Gauge, 3 Wires, 100' Long Your Part Number: 16011-00	1 Each	1
13	2063K141 Fiberglass Panel Air Filter, Not Merv Rated, 8 X 8 Trade Size, 1/2" Thick, Packs of 12 Your Part Number: 71400-30	1 Pack	1
14	51275K89 Polyethylene Tubing for Drinking Water, 3/4" ID, 7/8" OD, 1/16" Wall Thickness, White Your Part Number: 71400-15	50 Feet	50
15	3528T62 Crimping Tool for 3/4" Tube ID, Brass Barbed Fitting for Drinking Water Your Part Number: 71500-45	1 Each	1
16	3528T13 Ring for 3/4" Tube ID, Brass Barbed Fitting for Drinking Water, Packs of 5 Your Part Number: 71400-15	10 Packs	10
17	3528T24 Brass Barbed Fitting for Drinking Water, Straight for 3/4" Tube ID X 3/4 Male Pipe Size Your Part Number: 71400-15	6 Each	6
18	4429K333 Low-Pressure Brass Threaded Pipe Fitting, 3/4 X 3/8 X 3/4 Pipe Size, Inline Reducing Tee Your Part Number: 71400-15	5 Each	5
19	4429K252 Low-Pressure Brass Threaded Pipe Fitting, 3/8 Pipe Size, Tee Your Part Number: 71400-15	3 Each	3

McMaster-Carr Supply Company
200 Aurora Industrial Pkwy
Aurora, OH 44202-8087 USA
Phone: 330-995-5500
E-Mail: cle.sales@mcmaster.com
Employer Identification Number (EIN): 36-1458720

Fax: 330-995-9600

Invoice: 34204708

Purchase Order: PO29071

Release:

McMaster-Carr Number: 5807576-03

ORIGINAL COMMERCIAL

INVOICE

CERTIFICATE OF ORIGIN

Line	Description	Qty & Unit	Unit Price	Extension
5	4630A13 Nylon Mesh Sanding Bit, 1/8" Diameter Shank, Shape Number B52, Fine Grade 71500-30 Country of Origin: United States Schedule B #: 680422 ECCN #: EAR99 NLR	2 EA	\$3.76	\$7.52
7	97787A661 Expanding Diameter Quick-Release Pin, 1/4" Diameter, 1" Usable Length B134278 Country of Origin: United States Schedule B #: 731829 ECCN #: 9A991 NLR	6 EA	\$114.68	\$688.08
8	1770A525 Cam Lock with Polished Nickel Finish, Keyed to C420A, 3/4" Diameter Hole, 7/64" Material Thickness D3373-1P Country of Origin: United States Schedule B #: 830130 ECCN #: EAR99 NLR	10 EA	\$6.32	\$63.20
9	8860K62 Bend-and-Stay 302/304 Stainless Steel Wire, 0.025" Diameter, 1 lb Can, 595' Long 71400-40 Country of Origin: Peoples Republic of China Schedule B #: 722300 ECCN #: EAR99 NLR	5 EA	\$20.20	\$101.00
11	7194K28 High-Starting Amp Rocker Switch, SPST, Off-On, Black 71400-30 Country of Origin: Japan Schedule B #: 853650 ECCN #: EAR99 NLR	2 EA	\$8.17	\$16.34
12	6730T24 Armored Building Cable with Insulated Ground, 12 Gauge, 3 Wires, 100' Long 16011-00 Country of Origin: United States Schedule B #: 854449 ECCN #: EAR99 NLR	1 EA	\$89.17	\$89.17
13	2063K141 Fiberglass Panel Air Filter, Not Merv Rated, 8 X 8 Trade Size, 1/2" Thick, Packs of 12 71400-30 Country of Origin: United States Schedule B #: 701990 ECCN #: EAR99 NLR	1 PK	\$49.50	\$49.50
14	51275K89 Polyethylene Tubing for Drinking Water, 3/4" ID, 7/8" OD, 1/16" Wall Thickness, White 71400-15 Country of Origin: United States Schedule B #: 391732 ECCN #: EAR99 NLR	50 FT	\$1.79	\$89.50
15	3528T62 Crimping Tool for 3/4" Tube ID, Brass Barbed Fitting for Drinking Water 71500-45 Country of Origin: Peoples Republic of China Schedule B #: 820320 ECCN #: EAR99 NLR	1 EA	\$194.18	\$194.18
16	3528T13 Ring for 3/4" Tube ID, Brass Barbed Fitting for Drinking Water, Packs of 5 71400-15 Country of Origin: United States Schedule B #: 741999 ECCN #: EAR99 NLR	10 PK	\$2.04	\$20.40
17	3528T24 Brass Barbed Fitting for Drinking Water, Straight for 3/4" Tube ID X 3/4 Male Pipe Size 71400-15 Country of Origin: United States Schedule B #: 741220 ECCN #: EAR99 NLR	6 EA	\$6.86	\$41.16

Chantal Lavoie

From: McMaster-Carr <cle.sales@mcmaster.com>
Sent: Thursday, January 22, 2015 9:01 AM
To: Chantal Lavoie
Subject: RE: 97787A661
Attachments: winmail.dat; Quotation 67950 from McMaster-Carr.pdf

Hi Chantal,

There is a small quantity of the discontinued pins available for \$255.82 each, and they can ship in 1 week. The part number is 97787A999. Let us know if you would like to return the pins you have, and we can issue a return label.

John

From: cle.sales@mcmaster.com
Sent: Wednesday, January 21, 2015 4:03 PM
To: Chantal Lavoie <clavoie@dartaero.com>
Subject: RE: 97787A661

Hi Chantal,

We did change suppliers for these quick release pins (part number 97787A661) due to our old source discontinuing them. I am currently checking to see if any existing inventory exists from our old source, and will have an answer for you tomorrow.

John

From: Chantal Lavoie <clavoie@dartaero.com>
Sent: Tuesday, January 20, 2015 8:29 AM
To: cle.sales@correspondence.mcmaster.com
Subject: FW: 97787A661

Good morning,

We place and order for item 97787A661 x 12 pcs on po26808, we have received them but they are not the same as previous order. Please see attached for picture and packing slip.

Not sure if you guys change supplier, please advise would need to exchange them.

Thanks

Chantal

-----Original Message-----

From: Linda Lacelle
Sent: Tuesday, January 20, 2015 9:14 AM
To: Chantal Lavoie
Subject: